Appendix C
Correlated PM_{10} Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds[1] and PM_{10} concentrations at select monitoring sites within the Salton Sea Air Basin on June 26, 2014. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SITES
(Figures C-1 to C-2)

FIGURE C-1
BRAWLEY PM_{10} CONCENTRATION & WIND SPEED CORRELATION

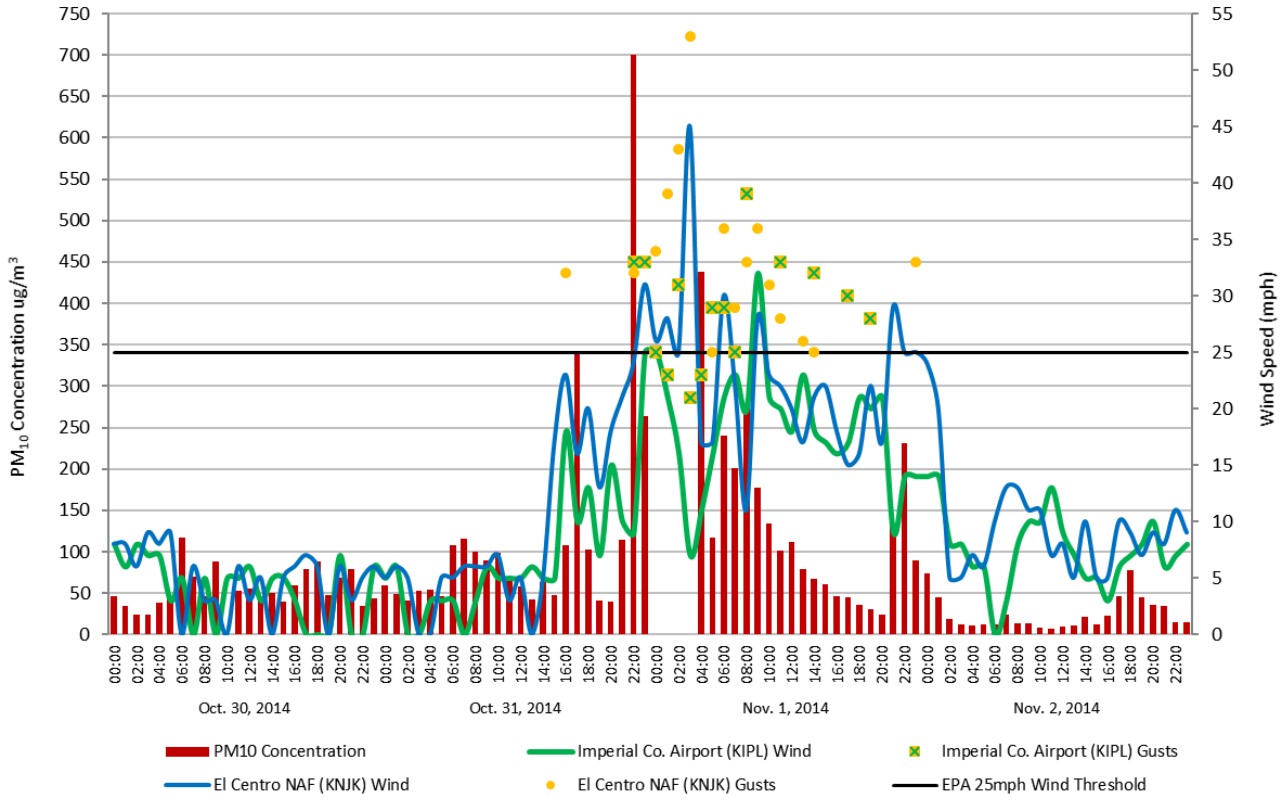


Fig C-1: Brawley PM10 concentration is paired with EL Centro NAF (KNJK) and Imperial County Airport (KIPL) because they are the closest meteorological sites to the station. Brawley station does not record wind data. Air quality and wind data from the EPA's AQS repository. Wind data from the NCEI's QCLCD system

[1] National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); https://w1.weather.gov/glossary/index.php?letter=w

FIGURE C-1
NILAND PM_{10} CONCENTRATION & WIND SPEED CORRELATION

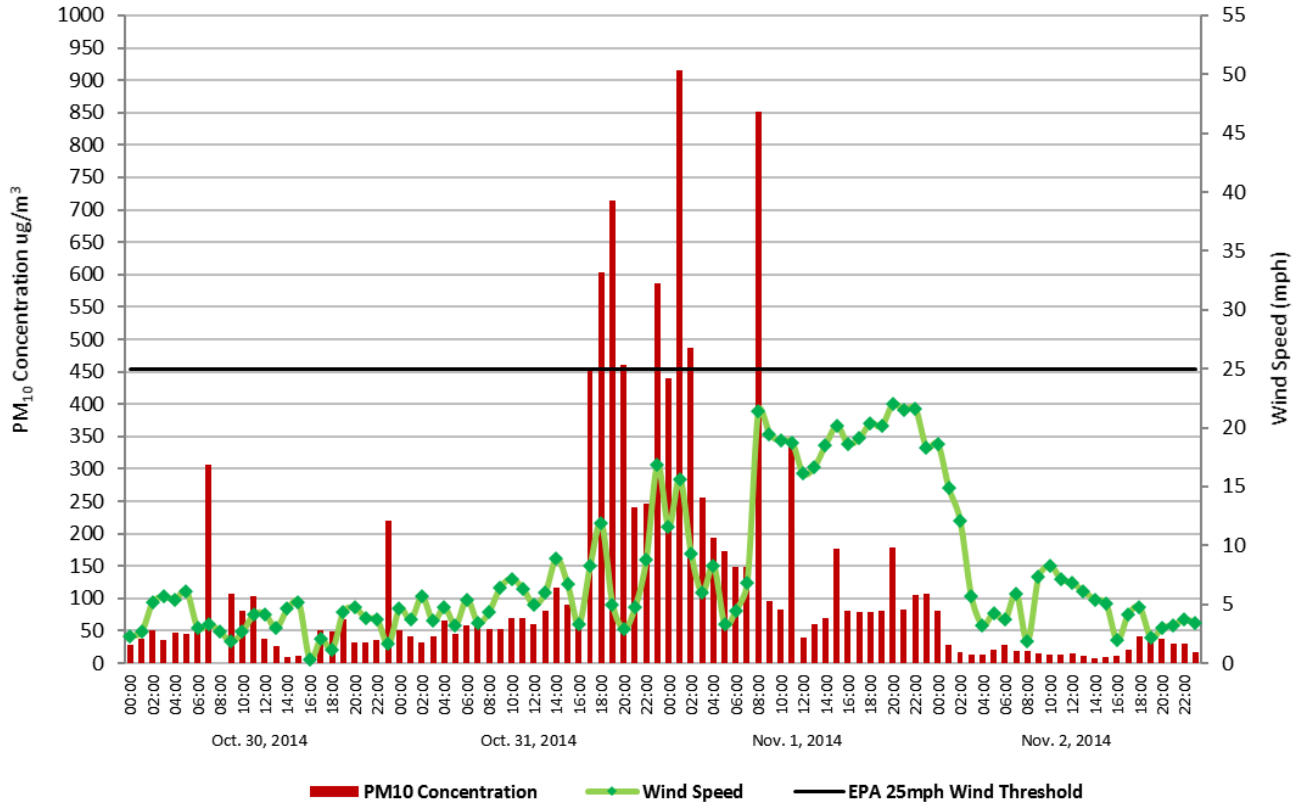


Fig C-2: Niland reported elevated winds on both October 31 and November 1, but winds were more modest than at upstream sites. This allowed for suspended dust to be deposited over the station. Air quality and wind data from the EPA's AQS repository

(EASTERN) RIVERSIDE COUNTY MONITORING SITES

FIGURES C-3 through C-7 show a similar spike in PM_{10} levels as wind speeds and gusts impacted the region. Palm Springs Fire Station uses Palm Springs Airport wind data; Indio (Jackson St) uses Jacqueline Cochran Regional Airport wind data; Torres-Martinez wind data is from the EPA's AQS repository. Air quality data for all sites is from EPA's AQS repository.

FIGURE C-3
INDIO (JACKSON ST) PM_{10} CONCENTRATION & WIND SPEED CORRELATION

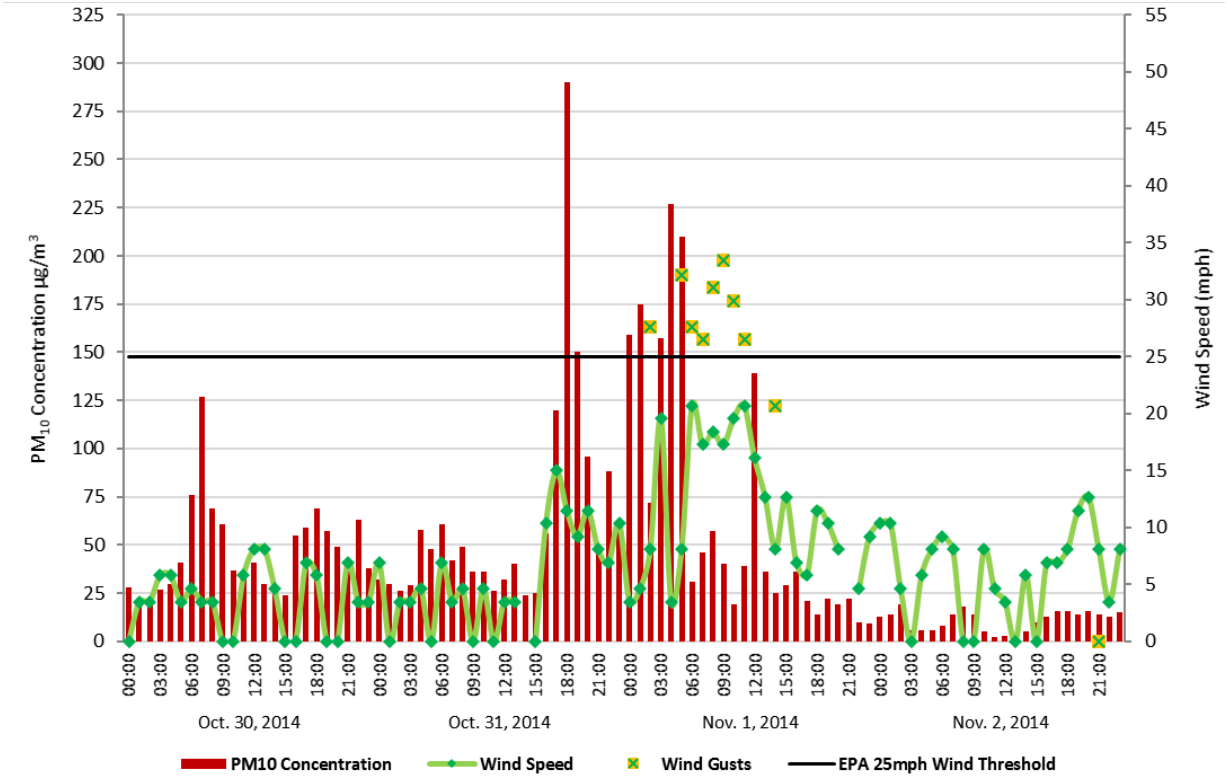


FIGURE C-4
PALM SPRINGS FIRE STATION PM_{10} CONCENTRATION & WIND SPEED CORRELATION

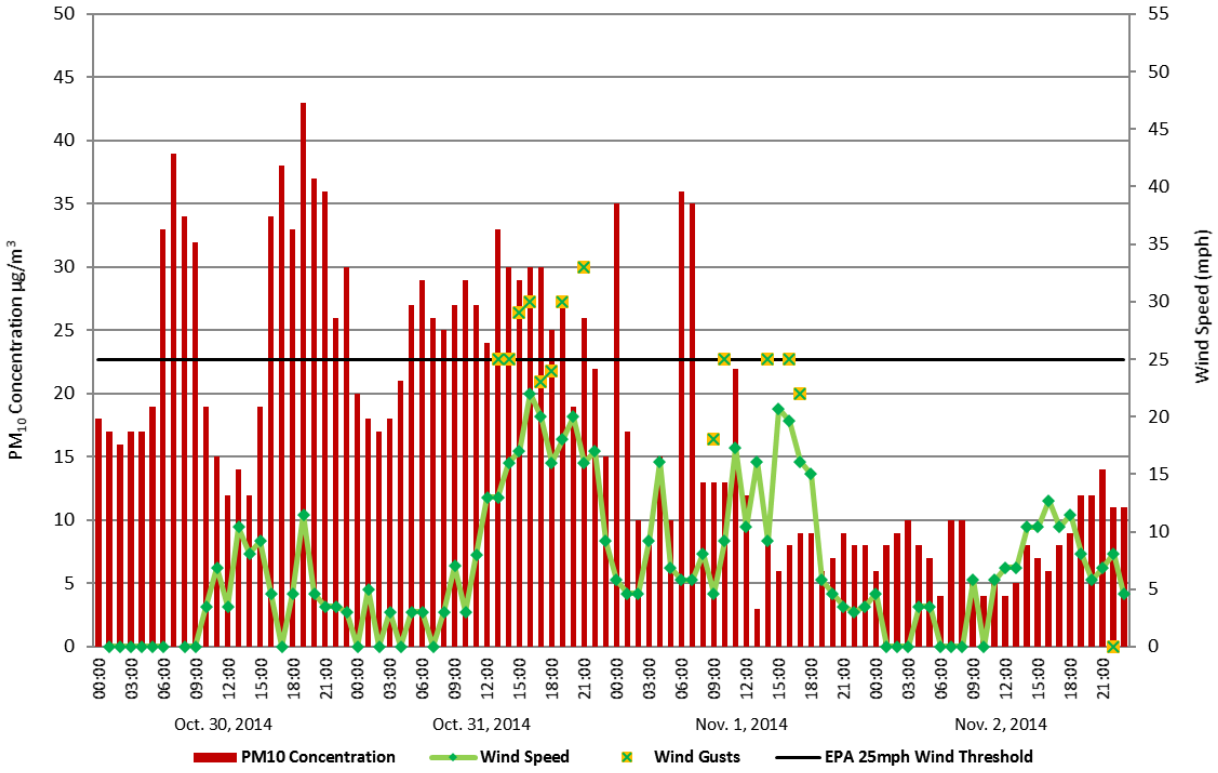
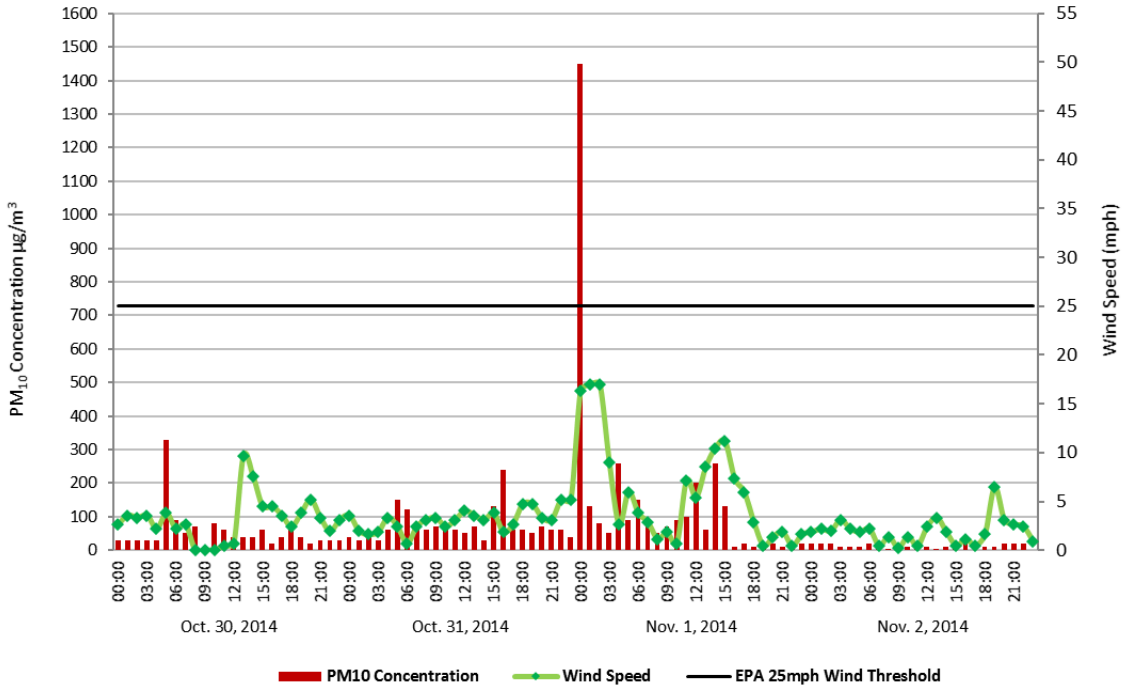


FIGURE C-5
TORRES-MARTINEZ TRIBAL PM_{10} CONCENTRATION & WIND SPEED CORRELATION



YUMA, ARIZONA MONITORING SITE

FIGURE C-6
YUMA, ARIZONA SUPERSITE PM_{10} CONCENTRATION & WIND SPEED CORRELATION

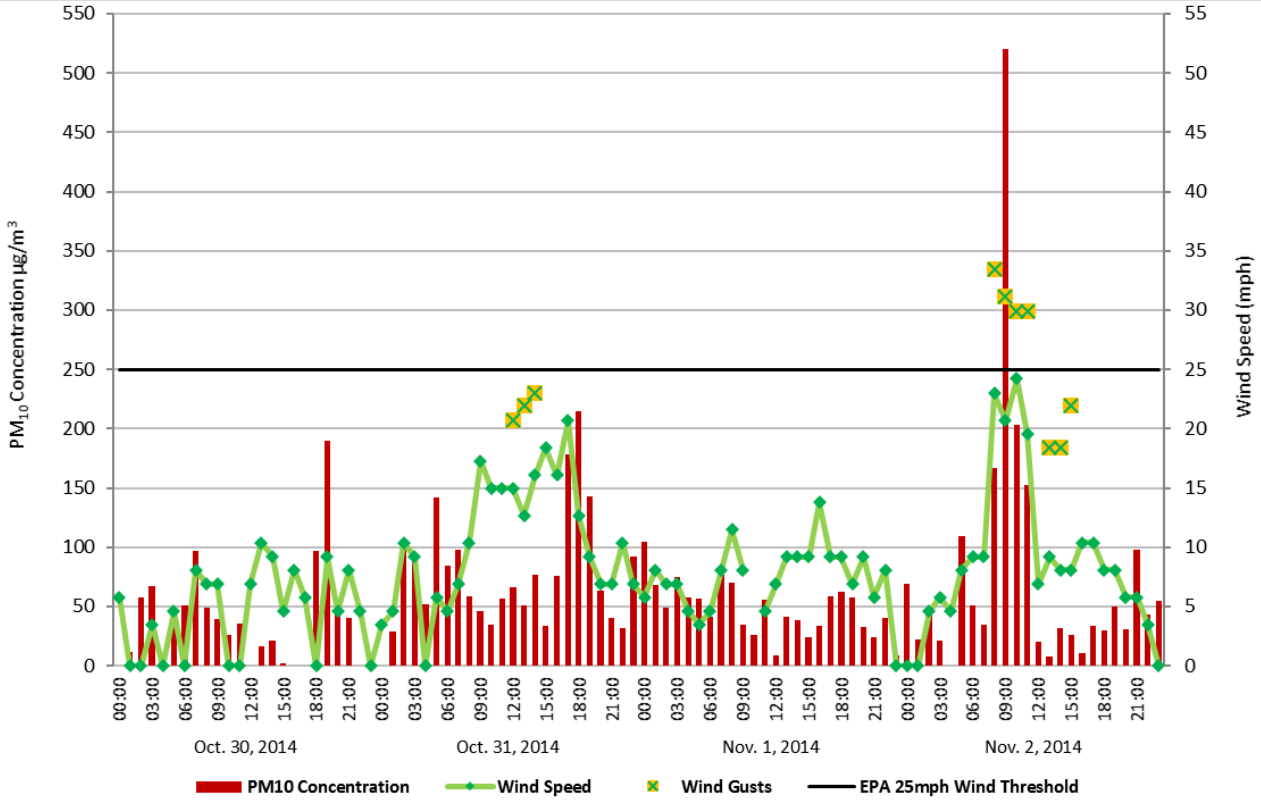


Fig C-6: The Yuma Supersite is located in the southwestern corner of Arizona. Concentrations recorded at the station were not as great as at Brawley and Niland, due to its downstream distance from those sites